

**REMARKS**

Favorable reconsideration of this application is respectfully requested.

**Rejection of claims 1-7, 12-15, and 17-28 under 35 U.S.C. §101**

Applicants respectfully traverse the rejection of claims 1-7, 12-15, and 17-28. It is respectfully submitted that they are directed to non-statutory subject matter.

According to Section 2106 of the Manual for Patent Examination Procedure (8th ed. August, 2006),

For purposes of an eligibility analysis, a physical transformation "is not an invariable requirement, but merely one example of how a mathematical algorithm [or law of nature] may bring about a useful application." AT&T, 172 F.3d at 1358-59, 50 USPQ2d at 1452. If USPTO personnel determine that the claim does not entail the transformation of an article, then USPTO personnel shall review the claim to determine if it produces a useful, tangible, and concrete result. In making this determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the final result achieved by the claimed invention is "useful, tangible, and concrete."

It is respectfully submitted that generation of a route distribution rule, which is required in each of the rejected independent claims, is a tangible, concrete and useful result. A node uses this rule for filtering routes in order to establish the VPN, using for example BGP. If it were not tangible and concrete, it could not be used by the node for this purpose. This is not an abstract concept with no practical application. The rejection is plainly in error.

**Rejection of claims 1-14 as being anticipated by the Cisco Document 78-10548-02 ("Cisco")**

This rejection of claims 1-14 is respectfully traversed.

The examiner relies on Figures 3-18, 3-28, 3-29, 3-41 through 3-46 to demonstrate "graphically defining at least one topological relationship between said plurality of sites of said VPN, the at least one topological relationship defining permitted communication between the plurality of sites." It is submitted that Figure 3-18 of Cisco shows a computer workstation interface for assigning provider edge routers to a region; that Figure 3-28 shows a workstation

interface for assigning customer edge routers to a site; and that Figure 3-29 is an interface for defining a "customer." Figures 3-41 to 3-46 illustrate interfaces on the computer for adding an MCE (a management customer edge router) to a management site interfaces on a computer, selecting an MCE and an MPE (management provider edge router) for provisioning a standard provider edge to customer edge (PE to CE) link (Figures 3-42 and 3-43) , choosing a routing protocol for this link (Figure 3-44), selecting a LAN or WAN interface and encapsulation type (Figure 3-45), and choosing an IP addressing for the link.

The Cisco reference explains on page 3-35 that

A key concept for this implementation technique is that all the CEs in the network are a member of the management VPN. The management VPN is a VPN that belongs to the service provider so that the service provider can manage the VPSN that belong to the customers.

Setting up this management VPN is what is being illustrated and discussed in the Cisco reference.

It is respectfully submitted that the examiner has not met his burden of showing that the Cisco reference graphically defines topographical relationships between sites of a VPN, as required by claim 1. The cited sections concern only setting up the underlying network structures, such as specifying membership of particular routers in a region (a group of routers within a single BPG autonomous system, as explained on page 3-16), specifying certain routers as management routers, and setting up links between a customer edge and a provider edge, all for the purpose of setting up a management VPN, not a customer VPN.

One benefit of the claimed invention is that the user need not be concerned with the underlying structure when specifying the relationships (e.g. hub-spoke or mesh) between customer sites of a VPN. The necessary route distribution rules for distribution to the routers are automatically generated based on the specified VPN configuration. (See page 9, lines 2-6). No knowledge of the connections between routers making up the network need to be known to the operator or user. As customer sites are added or taken away, or as the customer VPN topology needs to change, these changes can be easily implemented by a network operator using the invention.

Therefore, the Cisco reference cannot anticipate claim 1 for at least the reason that not all of the elements of the claim are taught by the Cisco reference. Because claim 1 is not anticipated, claims 2-14, which depend from claim 1, cannot be anticipated for the same reason. The remaining reasoning provided by the examiner with regard to claims 2-14 is now moot. Nevertheless, applicants reserve the right to address it, if necessary, and are not acquiescing in it.

Rejection of claims 15, 17-22 and 28 as being obvious in view of Cisco Document 78-10548-02 and Arquie.

The rejection of claims 15, 17-22 and 28 is in error for similar reasons. The Cisco reference, particularly figures 3-18, 3-28, 3-29, 3-14, 3-46 and 3-47, is cited as graphical displays for defining VPNs. However, they simply do not illustrate or suggest assigning customer sites to VPN components. They concern specifying certain CE and PE routers to certain regions, assigning certain CE and PE routers as management routers, setting up a link between a CE and a PE router, and, in figure 3-47, joining the CE to a management VPN. Again, the Cisco reference explains on page 3-35 that

A key concept for this implementation technique is that all the CEs in the network are a member of the management VPN. The management VPN is a VPN that belongs to the service provider so that the service provider can manage the VPSN that belong to the customers.

It is respectfully submitted that the simple process of adding a CE to a single management VPN by typing in information into forms on a computer screen is substantially different from the concept of specifying which customer sites are part of a VPN component, for example, a VPN hub, by simply dragging a representation of a customer site to a VPN component. The latter allows an operator to reconfigure readily customer VPNs and generate the necessary route distribution rules without having to know about the underlying network connections, as one must clearly know in order to set up membership of a CE in a management VPN using the software described in the Cisco reference.

Arquie appears only to concern automatically drawings (i.e. "routing") of connections between objects on a computer screen representing network components in order to achieve "efficient, organized and aesthetically pleasing routing."

Therefore, it is submitted that there is no teaching or suggestion in the combination of the Cisco reference and Arquie for allowing a user to specify membership of customer site in a VPN component by dragging a representation of the site to a representation of the component. For at least this reason, the examiner has not met his legal burden of establishing a *prima facie* case of obviousness, and rejection of claims 15 and 21 on these grounds is therefore in error. Because the rejections of the dependent claims 17-20, 22 and 28 are based on this same reasoning, they too are in error, and therefore the additional reasoning supplied in connection with those claims is moot. Nevertheless, applicants reserve the right to address this additional reasoning, if necessary, and are not acquiescing in it.

### **CONCLUSION**

In view of the arguments set forth above, Applicants respectfully submit that the Application is now in allowable form. Accordingly, Applicants respectfully request reconsideration and allowance of the currently pending claims.

Applicants hereby authorize the Commissioner to charge any fees, other than issue fees, that may be required by this paper to Deposit Account No. 07-0153. The Examiner is respectfully requested to call Applicants' Attorney for any reasons that would advance the current application to issue. Please reference Attorney Docket No. 131105.1004.

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Respectfully submitted,

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